Work Order ID 67341

Tuesday, March 15, 2011 2:22:37 PM

Item ID: D205-634-011DG **Accept** **Setup Start**

Revision ID: **Stop**

Item Name: Skidtube, Drab Green

Start Date: 3/15/2011 **Start Qty:** 1.00 **Cust Item ID:**

Required Date: 3/15/2011 **Req'd Qty:** 1.00 **Customer:**

Reference: Rework

Run Start

Approvals: **Process Plan:** **Date:** **Tooling:** **Date:**

Stop

QC: **Date:** **SPC (Y/N):** **Date:**

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								

DART
Dart Aerospace Ltd.
1270 ABERDEEN ST.
HAWKESBURY, ON, CANADA K6A 1K7
TC APPROVAL # 09-89
TEL: 1-613-632-5200

P/N	D205-634-011DG	CHG	CHG008
DESC.	Skidtube	STC	SH96-88
LOT	B67103	STC	SR00563NY
MODEL	Bell 205/210/212/214/412/UH-1H	STC	

PATENTS: US #5735484 / CA #2222184 EUROPEAN No. # 0828655 MADE IN CANADA D2729-2

100 0.00

DC

Document Control

Memo 0.00

Photocopy bluefile &type labels per PPP D205-634-011DG
CHG 008

8 11/03/22

104 0.00

HandFinish

Hand Finishing

Memo 0.00

PULL FROM STOCK:
1 X D205-634-011DG B67103

REMOVE CAP, PUT ASIDE TO REASSEMBLE TO SAME TUBE

105 0.00

Skidtubes

Skidtubes

Memo 0.00

REMOVE CRACKED SPACERS D4202-1
REPLACE WITH NEW SPACERS
D4202-1 B 67308 (.049W)

2ND From Aft

DP 11-3-16

Work Order ID 67341

Tuesday, March 15, 2011 2:22:37 PM

Item ID: D205-634-011DG

Revision ID:

Item Name: Skidtube, Drab Green

Start Date: 3/15/2011 **Start Qty:** 1.00

Required Date: 3/15/2011 **Req'd Qty:** 1.00

Reference:

Accept

Setup Start

Stop

Cust Item ID:

Customer:

Run Start

Stop

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
106 QC Quality Control	QC5- Inspect part completeness to step on W/O **Memo**	0.00 0.00							
107 Powdercoat Powder Coating	**Memo** TOUCH UP A/R REASSEMBLE ORIGINAL CAP	0.00 0.00							
108 QC Quality Control	QC5- Inspect part completeness to step on W/O **Memo**	0.00 0.00							

Work Order ID 67341

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Reference:

Run Start

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

Stop

QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
110	Pick Kit	0.00							
Packaging									
Packaging	**Memo** RE-PACKAGE USING NEW B/N	0.00							
	K10003 B 67046 cHy602								
120	QC4- 100% Inspect kits for completeness	0.00							
QC	**Memo**	0.00							
Quality Control									
130		0.00							
Packaging	**Memo**	0.00							
Packaging	Identify and pack for shipping as per PPP D205-634-011DG Location: _____ PPP rev: _____								

Work Order ID 67341

Tuesday, March 15, 2011 2:22:37 PM

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Item Name: Skidtube, Drab Green

Start Date: 3/15/2011 **Start Qty:** 1.00 **Cust Item ID:**

Required Date: 3/15/2011 **Req'd Qty:** 1.00 **Customer:**

Reference:

Run Start

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

Stop

QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
140	QC21- Final Inspection - Work Order Release	0.00							11/3/22
QC Quality Control	**Memo**	0.00							MF 11-03-22

POSITIVE RECALL
EFFECTIVE 11.03.16 AUTH
RELEASED DATE 11.03.17

Picklist Print

Tuesday, March 15, 2011 2:22:33 PM

Work Order ID: 67341

Parent Item: D205-634-011DG

Parent Item Name: Skidtube, Drab Green

Start Date: 3/15/2011 **Required Date:** 3/15/2011

Start Qty: 1.00 **Required Qty:** 1.00

Comments: IPP Rev:A 11.02.17 new issue DD verified by: EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D205-634-011DG Skidtube, Drab Green		Manufactured	No				Each	3.0000		1			

B 67103 8 11/03/15

Location		Loc Qty	Loc Code
FG		3	
	67101	1	
	67102	1	
	67105	1	

D4202-1 Spacer		Manufactured	No				Each	333.0000		1			

Location		Loc Qty	Loc Code
LG		8	
	67308	8	
LG002		325	
	65529	13	
	66121	1	
	66929	110	
	67129	201	

1 11-3-16

Dart Aerospace Ltd D205-634-611 SKIDTUBES

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
11.03.16	GP 11.03.16 PS/GPL	RE-WORK CRACKED 0.058" WALL XBOLT SPACERS. REPLACE WITH 0.049" WALL XBOLT SPACERS THAT ARE OTHERWISE MADE TO D4202 REV.A				GP 11.03.16 PS/GPL	

Part No: _____ **PAR #:** _____ **Fault Category:** _____ **NCR:** Yes No **DQA:** _____ **Date:** _____

Resolution: _____ **Disposition:** _____ **QA: N/C Closed:** _____ **Date:** _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Chris Provencal

From: David Shepherd <dshepherd@dartaero.com>
Sent: March 16, 2011 6:21 PM
To: 'Chris Provencal'
Cc: 'Mike Petsche'; 'Linda Lacelle'; 'Bill Beckett'
Subject: RE: 0.049 Wall Xbolt Spacers

Chris,

The substitution is acceptable. However, I would still like to see that this is repeatable. Per my earlier suggestion, I assume production is building a couple of tubes with 0.049 wall crossbolt spacers to verify that there is no cracking after several swagings???

David

From: Chris Provencal [mailto:cprovencal@dartaero.com]
Sent: Wednesday, March 16, 2011 9:14 AM
To: David Shepherd
Cc: Mike Petsche
Subject: 0.049 Wall Xbolt Spacers

David,

To approve the re-worked xbolt spacers, I'd need to attach an email from you giving OK to substitute the 0.058" wall crossbolt spacers with 0.049" wall crossbolt spacers. The crossbolt spacers are otherwise made to D4202 Rev. A.

The justification would be the initial testing, as recorded in the original design review, which showed that 0.049" wall xbolt spacers were stronger than welded/c-bored crossbolt spacers. These finding were confirmed when we tested another batch of swaged vs welded samples yesterday (March 15th, 2011).

Chris